



## EARLY PAYMENT/PAYOUT FACT SHEET – DURING A FIXED RATE PERIOD

Northern Inland Credit Union Ltd ABN 36 087 650 422 AFSL 235022 Australian credit licence 235022

**Break costs:** are payable when you are taken to have broken your fixed rate period. This occurs during the fixed rate period:

- By repaying all of the balance owing on your loan; or
- By making additional repayments in excess of the two stipulated extra repayments of \$5000 during any one Fixed Rate Year; or
- By switching from one fixed rate loan to another, or by switching from a fixed rate to a variable rate option; or
- If the total amount owing becomes repayable because you are in default.

The break costs when repaying a fixed rate loan (or a portion of the loan\*) is calculated at the greater of:

- \$300; or
- The sum of the present value of repayment cash flows remaining in the fixed rate period (including the balance scheduled to be outstanding at the end of the fixed rate period as a repayment), discounted at the current rate for new fixed rate loans for the remaining fixed rate period, less the principal amount that is currently outstanding.

Note: If a partial break cost is being calculated, then the answer is multiplied by the ratio of the principal repayment to the total principal that is outstanding at the time of the break.

Warning: Break costs can be high and may increase the amount that you owe to us. You can get an estimate of an applicable break cost at any time by contacting us. Please obtain independent financial advice if you require more information on the nature of break costs and the amount you have to pay.

**Calculation of break costs:** Break costs are an amount equal to our reasonable estimate of our loss arising as a result of your breaking the fixed rate period. This loss usually arises because of changes in market interest rates between the start of the fixed rate period and when you break. We calculate the break costs using the break costs method set out below. The amount you are charged is the greater of \$300 or the amount calculated by applying the break costs method.

**Assumptions used in the calculation:** in calculating the break cost using the method set out below:

- The part of the fixed rate period remaining after the break is rounded down to the nearest month, fortnight or week, depending on your loan repayment frequency.
- If the part of the fixed rate period remaining after the break does not equal any fixed rate period we are then offering, we set the current rate in good faith.
- We assume that all repayments would have been paid as scheduled.

**Break costs method:** the break costs method (when total loan repayment occurs) is:

The sum of the present value of repayment cash flows remaining in the fixed rate period (including the balance scheduled to be outstanding at the end of the fixed rate period as a repayment) LESS the principal amount that is currently outstanding, WHERE the present value repayment =  $\text{Repayment} / ((1 + \text{Reinvestment Rate})^{\text{Period}})$ . Note:

- The 'reinvestment rate' is deemed to be the 'current rate'.
- The 'current rate' refers to the fixed rate that would apply if you started under a fixed rate option on the day of the break, for a fixed rate period equal to the part of the actual fixed rate period remaining after the break.
- If a partial break cost is being calculated, the answer using the formula above is multiplied by the ratio of the principal repayment to the total principal outstanding at the time of the break.

**Break Cost Impact – Worked Example:** the impact on interest margin is best explained by way of an example whereby NICU has the following fixed rate loan with a Member:

Principal Outstanding:	\$20,000
Scheduled Repayment:	\$452.50
Loan Fixed Interest Rate:	8%
Remaining Fixed Term:	2 years
4 months (at which stage the loan reverts to Variable)	

**Calculations in above table:** The current rate (reinvestment rate) that NICU can earn on an equivalent type of loan is 6%. The repayment schedule with interest flows can be shown on the table overleaf, where

- Term remaining of 24 months and Repayment of \$452.50 are given
- Loan Interest = Balance x Interest Rate x 1/12, where: 1/12 represents a basic monthly interest period
- Balance = Previous Balance – Repayment + Loan Interest.
- Present value repayment =  $\text{Repayment} / ((1 + \text{Reinvestment Rate})^{\text{Period}})$ , being the present value of a
- Future cash flow, discounted at the current interest rate of 6%.

Amortisation Schedule – Table 1

Months	Repay- ment	Loan Int	Principal	Balance	PV Rpmt @ time 0	Loan Int	Principal	Balance	PV Rpmt @ time 0
		8%			6%	6%			6%
0				20,000.00				20,000.00	
1	452.50	133.33	319.17	19,680.83	450.25	100.00	352.50	19,647.50	450.25
2	452.50	131.21	321.29	19,359.54	448.01	98.24	354.26	19,293.24	448.01
3	452.50	129.06	323.44	19,036.10	445.78	96.47	356.03	18,937.20	445.78
4	452.50	126.91	325.59	18,710.51	443.56	94.69	357.81	18,579.39	443.56
5	452.50	124.74	327.76	18,382.75	441.36	92.90	359.60	18,219.79	441.36
6	452.50	122.55	329.95	18,052.80	439.16	91.10	361.40	17,858.39	439.16
7	452.50	120.35	332.15	17,720.65	436.97	89.29	363.21	17,495.18	436.97
8	452.50	118.14	334.36	17,386.29	434.80	87.48	365.02	17,130.15	434.80
9	452.50	115.91	336.59	17,049.70	432.64	85.65	366.85	16,763.30	432.64
10	452.50	113.66	338.84	16,710.86	430.48	83.82	368.68	16,394.62	430.48
11	452.50	111.41	341.09	16,369.77	428.34	81.97	370.53	16,024.09	428.34
12	452.50	109.13	343.37	16,026.40	426.21	80.12	372.38	15,651.71	426.21
13	452.50	106.84	345.66	15,680.74	424.09	78.26	374.24	15,277.47	424.09
14	452.50	104.54	347.96	15,332.78	421.98	76.39	376.11	14,901.36	421.98
15	452.50	102.22	350.28	14,982.50	419.88	74.51	377.99	14,523.37	419.88
16	452.50	99.88	352.62	14,629.88	417.79	72.62	379.88	14,143.48	417.79
17	452.50	97.53	354.97	14,274.91	415.71	70.72	381.78	13,761.70	415.71
18	452.50	95.17	357.33	13,917.58	413.65	68.81	383.69	13,378.01	413.65
19	452.50	92.78	359.72	13,557.86	411.59	66.89	385.61	12,992.40	411.59
20	452.50	90.39	362.11	13,195.75	409.54	64.96	387.54	12,604.86	409.54
21	452.50	87.97	364.53	12,831.22	407.50	63.02	389.48	12,215.39	407.50
22	452.50	85.54	366.96	12,464.26	405.48	61.08	391.42	11,823.96	405.48
23	452.50	83.10	369.40	12,094.86	403.46	59.12	393.38	11,430.58	403.46
24	452.50	80.63	371.87	11,722.99	401.45	57.15	395.35	11,035.24	401.45
PV Balance time 24									9,790.30
<b>Totals</b>									<b>20,000.00</b>
Interest at 8% pa		2,582.99							
Interest at 6% pa		1,895.24							
Difference		687.75							

Under this scenario the Member wants to fully payout the loan and NICU will no longer receive the fixed interest stream of 8% or \$2582.99 over the remaining fixed period. Instead, we assume NICU can invest the funds for a similar period at the current rate of 6% generating \$1895.4 of future income, which results in lower income than previously budgeted. However, the break cost cannot simply be calculated as the difference between the two future income streams as we need to value the break cost decision in today's terms, recognizing a dollar 'in hand' has more value than a dollar that is to be received at a future time. The calculation focuses on the net present value of the future repayment stream, relative to the principal received when the loan is paid out. In the scenario NICU incurs the cost associated with receiving \$20000 today if the

loan was paid out as opposed to the net present value of the future fixed repayment stream being \$20,610.17. The break cost would be \$610.17. To check the result, the following amortisation schedule is provided using \$20,610.17 as the principal balance at month zero (being the loan amount plus the break cost). The income stream is recalculated at 6% and the net present value of the future repayment stream is discounted at the same rate.

Amortisation Schedule at New Rate & Revised Principal – Table 2

Period	Repayment	Loan Int	Principal	Balance	PV Rpmt @ time 0
		6%			6%
0				20,610.17	
1	452.50	103.05	349.45	20,260.72	450.25
2	452.50	101.30	351.20	19,909.52	448.01
3	452.50	99.55	352.95	19,556.57	445.78
4	452.50	97.78	354.72	19,201.85	443.56
5	452.50	96.01	356.49	18,845.36	441.36
6	452.50	94.23	358.27	18,487.09	439.16
7	452.50	92.44	360.06	18,127.02	436.97
8	452.50	90.64	361.86	17,765.16	434.80
9	452.50	88.83	363.67	17,401.48	432.64
10	452.50	87.01	365.49	17,035.99	430.48
11	452.50	85.18	367.32	16,668.67	428.34
12	452.50	83.34	369.16	16,299.51	426.21
13	452.50	81.50	371.00	15,928.51	424.09
14	452.50	79.64	372.86	15,555.65	421.98
15	452.50	77.78	374.72	15,180.93	419.88
16	452.50	75.90	376.60	14,804.34	417.79
17	452.50	74.02	378.48	14,425.86	415.71
18	452.50	72.13	380.37	14,045.49	413.65
19	452.50	70.23	382.27	13,663.22	411.59
20	452.50	68.32	384.18	13,279.03	409.54
21	452.50	66.40	386.10	12,892.93	407.50
22	452.50	64.46	388.04	12,504.89	405.48
23	452.50	62.52	389.98	12,114.92	403.46
24	452.50	60.57	391.93	11,722.99	401.45
PV Balance time 24					10,400.47
<b>Totals</b>		<b>1,972.82</b>	<b>8,887.18</b>		<b>20,610.17</b>

**In summary, if the:**

- Reinvestment Rate > Current Loan Rate; then no break cost is charged\* as the NPV of the future stream is less than the principal paid out, OR
- Reinvestment Rate = Current Loan Rate; then no break cost is charged\* as the NPV of the future stream equals the principal paid out, OR
- Reinvestment Rate < Current Loan Rate; then a break cost is charged\* as the NPV of the future stream will be greater than the principal paid out.

\* Note: A minimum amount applies – refer to NICU's Schedule of Fees & Charges brochure.